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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,681

01/23/2004

Salvatore Atzeni

ATZENI-NP

7482

545

7590

01/24/2006

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EXAMINER

ALLEN, STEPHONE B

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

20

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/763,681	ATZENI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephone B. Allen	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka (6,496,267) in view of Sevick-Muraca et al. (5,865,754) hereinafter (Sevick-Muraca).

With respect to claim 20, Takaoka discloses an apparatus for performing fluorescence measurements, comprising: a light source 1 generating laser excitation energy oriented to illuminate a sample 5 to be measured and cause said sample to emit fluorescent energy; a frequency generator 3a, 3b generating a plurality of modulation frequencies and a plurality of heterodyne frequencies, each of said heterodyne frequencies being associated with one of said modulation frequencies the frequency generator being coupled to the excitation source, whereby the source generates excitation energy modulated in intensity in proportion to the modulation frequencies; and optical member 2 positioned to receive the laser excitation energy and divert a portion of the laser excitation energy, the portion of the laser excitation energy forming a reference laser excitation signal; focusing optics 4 positioned to receive the fluorescent energy and form an image modulated with the plurality of modulation frequencies; detector elements 9, 11 receive the image; and a calculating device 13 coupled to said

Art Unit: 2878

measurement signals, the heterodyne signals and the reference laser excitation signals and configured to extract phase and the modulation information (column 3, line 5 – column 5, line 67).

Takaoka is silent as to the inclusion of an image intensifier positioned to receive said image and a multi-element optical detector positioned to receive the intensified image modulated with said plurality of modulation frequencies and generating response thereto a plurality of measurement signals. Sevick-Muraca et al (column 4, lines 6-17) disclose a fluorescence imaging system that uses a image intensifier and multi-element optical detector (CCD) as a means of receiving the image and generating a plurality of measurement signals based on the received image. It would have been obvious for one of ordinary skill in the art to modify Takaoka to include a detector arrangement as disclosed in Sevick-Muraca in order to increase accuracy in detecting the fluorescence from the sample.

With respect to claim 21, the modified Takoaka discloses wherein the calculating means is a computer.

With respect to claims 22 and 23, the modified Takoaka discloses wherein the focusing optics is confocal microscope optics.

***Allowable Subject Matter***

Claims 1-19 and 24-26 are allowed.

Art Unit: 2878

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephone B. Allen whose telephone number is 571-272-2434. The examiner can normally be reached on M-F 08:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Stephone B Allen  
Primary Examiner  
Art Unit 2878

sba